Ex. No: 7

## Setup and configure a LAN

**Aim:** To setup and configure a LAN using a switch and ethernet cables in your lab.

## How to set up a LAN:

**Step 1:** Plan and design an appropriate network topology taking into account network requirements

**Step 2:** You can take 4 computers, a switch with 8, 16 or 24 ports which is sufficient for network of these size.

**Step 3:** Connect your computers to network switch via an Ethernet cable, which is as simple as plugging one end of the Ethernet cable into your compute

**Step 4:** Assign IP address to your PC

1. log on to the client computer as administrator

2. click Network and internet connections

3. Right click local Area connection/ Ethernet → Go to properties → Select a Internet protocol (TCP)

→ click on properties → Select use the following ip address option

step 5:

1. Connect your computer to the server to access the switch web interface you will need to connect your computer

2. log in to the web interface: and open a web browser and enter the IP address of the switch in address bar. this should bring up the login page for the switch web interface.

3. Configure basic settings: Once your logged in, you will be able to configure basic setting.
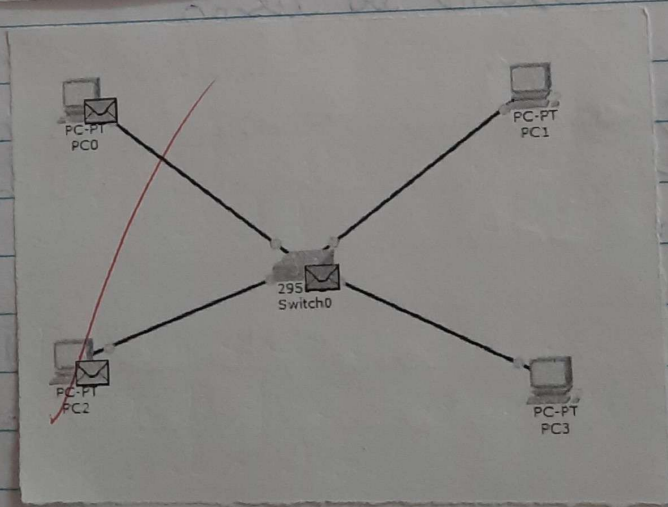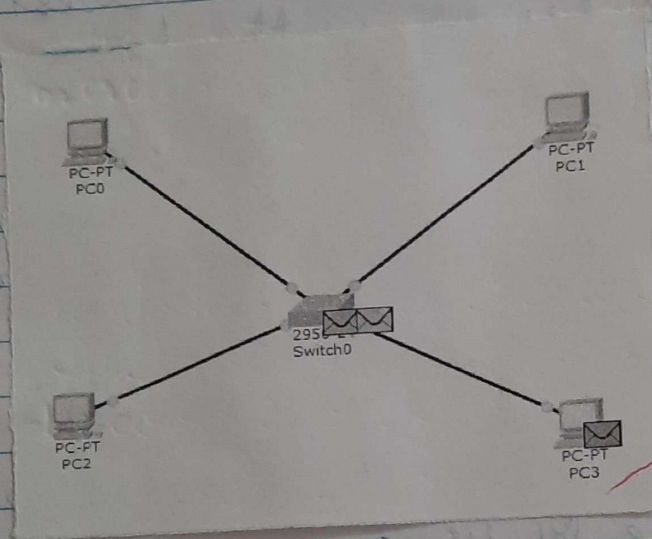
4) Assign IP address.

Step 6: Check the connectivity between switch and other machine by using

Step 7: Select a folder → go to properties → Click sharing tab → Share it with everyone on the same LAN.

Step 8: Try access and the shared folder from others Computers of the network.

## Student Observation:

Draw a neat diagram of the LAN in the
configuration observation book, that you have
implemented in your lab. Write the ip
configuration of each and every device.

IP address to all the PC-S connected to switch

PC 1 - IP address: 10.1.1.1, subnet mask 255.0.0.0
PC 2 - IP address: 10.1.1.2, subnet mask 235.0.0.0
PC 3 - IP address: 10.1.1.3, subnet mask 255.0.0.0
PC 4 - IP address: 10.1.1.4, subnet mask 255.0.0.0

Result:
The configuration of a LAN using a switch and ethernet cables in the lab is implemented.